

ABSTRACT

A circuit, apparatus and method for providing a cross-coupled load with built-in current mirrors are provided in embodiments of the present invention. In an embodiment of the present invention, a circuit comprises a first node for providing a first variable voltage and a second node for providing a second variable voltage. In an embodiment of the present invention, a clock signal generates the first variable and second variable voltages. A first transistor is coupled to the first node and provides a first current responsive to a first control voltage being applied to the first transistor gate. A second transistor is coupled to the second node and provides a second current responsive to a second control voltage being applied to the second transistor gate. The first and second transistors operate in a saturation region. A first control circuit is coupled to the first transistor gate and the second node. The first control circuit provides the first control voltage responsive to the first variable voltage. A second control circuit is coupled to the second transistor gate and the first node. The second control circuit provides the second control voltage responsive to the second variable voltage. In an embodiment of the present invention, the first and second currents are used to provide a duty cycle correction signal.